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## NOTICE OF ALLOWANCE AND FEE(S) DUE

SMITH, GAMBRELL & RUSSELL 1130 CONNECTICUT AVENUE, N.W., SUITE 1130 WASHINGTON, DC 20036 EXAMINER

LACLAIR, DARCY D

ART UNIT PAPER NUMBER

1763

DATE MAILED: 07/13/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,853	05/16/2006	Rudiger Nowak	032301.457	7869

TITLE OF INVENTION: ADHESIVE AND SEALANT SYSTEMS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/13/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u> SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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an application. Confidentiality is governed by 37 C.F.R. 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR ATTORNEY DOCKET NO.		CONFIRMATION NO.	
10/595,853	05/16/2006	Rudiger Nowak	032301.457 7869		
SMITH, GAMBRELL & RUSSELL			EXAMINER		
			LACLAIR, DARCY D		
1130 CONNECTICUT AVENUE, N.W., SUITE 1130 WASHINGTON, DC 20036		ART UNIT	PAPER NUMBER		
			1763		

DATE MAILED: 07/13/2011

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 87 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 87 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## **Privacy Act Statement**

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)	
	40/505 050		
Notice of Allowability	10/595,853 <b>Examiner</b>	NOWAK ET AL.  Art Unit	
•			
	DARCY D. LACLAIR	1763	
The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate communication is significant or communication in the communication is significant or communication in the communication is significant or communication.	n this application. If not included unication will be mailed in due course	
1. $\boxtimes$ This communication is responsive to $4/21/2011$ .			
2. 🔀 The allowed claim(s) is/are <u>1,3 and 5-7</u> .			
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority ur</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> </ul>	, . ,	or (f).	
2. ☐ Certified copies of the priority documents have		on No	
3. ☑ Copies of the certified copies of the priority do			m the
International Bureau (PCT Rule 17.2(a)).		3 11	
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	IENT of this application.		
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>			E OF
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.		
(a) $\square$ including changes required by the Notice of Draftspers	on's Patent Drawing Review	v ( PTO-948) attached	
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or	in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			of
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			е
Attachment(s)	5 □ Notice of In	formal Datant Application	
<ol> <li>Notice of References Cited (PTO-892)</li> <li>D Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>		formal Patent Application ummary (PTO-413),	
<ol> <li>Information Disclosure Statements (PTO/SB/08),</li> </ol>	Paper No.	/Mail Date Amendment/Comment	
Paper No./Mail Date			
<ol> <li>Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol>		Statement of Reasons for Allowance	•
	9. Other		
/D. D. L./ Evaminer Art Unit 1763	/MILTON I CAN		
Examiner, Art Unit 1763	Supervisory Pa	tent Examiner, Art Unit 1763	

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### Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

- 2. Authorization for this examiner's amendment was given in a telephone interview with Suzannah Sundby on 7/3/2010.
- 3. The application has been amended as follows:

In originally numbered Claim 1:

- i) line 2, change "polyurethane, silane-terminated polymers, silicones, unsaturated" to --polyurethane, unsaturated --.
- ii) in line 6, change "polysulfide, polyethylene, polypropylene, fluorinated hydrocarbons," to -- polysulfide, fluorinated hydrocarbons--
- iii) in line 15-16, change "silica that has not been compacted with a roller compactor or by a pressing filter belt" to --silica that has not been compacted by a pressing filter belt--.

In originally numbered Claim 3:

i) line 2, change "polyurethane, silane-terminated polymers, silicones, unsaturated" to -- polyurethane, unsaturated --.

Application/Control Number: 10/595,853

Art Unit: 1763

ii) in line 6, change "polysulfide, polyethylene, polypropylene, fluorinated hydrocarbons," to -- polysulfide, fluorinated hydrocarbons--

iii) in line 15-16, change "silica that has not been compacted with a roller compactor or by a pressing filter belt" to --silica that has not been compacted by a pressing filter belt--.

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#### Statement of Reasons for Allowance

4. The present claims are allowable over the closest prior art Nowak et al. (US 2001/0047047), Deller et al. (WO 2003097713 A1), Gruenewaelder et al. (WO 2001090271), Hasenzahl et al. (US 20020197311), for the following reasons:

The present claims are drawn to an adhesive or sealant composition and method for preparing the same, where the composition of the sealant includes a resin in combination with 1 to 15% by weight of a particularly defined hydrophobic pyrogenic silica having compacted bulk density of 60 g/L to 200 g/L combined with a BET surface area of 80 to 290 m2/g, and a carbon content in the silica component of 1.0% to 6.5% by weight, and the silica is compacted by a pressing filter belt which provides a thixotrophic behavior to the silica. The silica compacted by a pressing filter belt has a different structure from silica modified by other structure modifying methods, such as ball milling. (Note p. 1 of the 3 page Affidavit submitted 7/13/2010) This renders the claimed silica particular from other structurally modified silicas having similar hydrophobicity and pyrogenic preparation methods.

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Nowak, and Deller, alone or in combination, teach a pressing filter belt compacted silica in combination with styrenic polymers, amines, and phenols such as phenol formaldehyde and phenol-cresol. The instant claims are limited to species which do not overlap with these patents, and thus it is clear that these references, taken individually or in combination, do not disclose or suggest the claimed invention.

With respect to Gruenewaelder and Hasenzahl, Gruenewaelder teaches a polyurethane adhesive which contains a thickener which is a highly disperse silicic acid. (see abstract) The requirement for a highly disperse silica thickener would not motivate one of ordinary skill in the art to use a compacted silica, such as that taught in Hasenzahl. Further, the combination of these two references selects from a pharmaceutical and cosmetic composition and a single component polyurethane for use in structural applications such as wood building materials, and the like. Thus it is clear that these references, taken individually or in combination, do not disclose or suggest the claimed invention.

The examiner notes that in order to retain consistency, the independent claims have also been amended to indicate that the reduced incorporation time comparison is made between the claimed silica, which is compacted by a pressing filter belt, and other silicas which have not been compacted by a pressing filter belt. Thus the claim language maintains consistency.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Nowak et al. (US 7,098929) teaches a polypropylene glycol with a compacted silica and Ettlinger et al. (US 4,309,023) teaches a silicone rubber composition, which may be inherently silane terminated, employing a compacted silica.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darcy D. LaClair whose telephone number is (571)270-5462. The examiner can normally be reached on Monday-Friday 8:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MILTON I CANO/ Supervisory Patent Examiner, Art Unit 1763 Darcy D. LaClair Examiner Art Unit 1796

/DDL/